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DEVOTED TO MINING, MISCELLANEOUS LITERATURE, THE USEFUL ARTS AND SCIENCES.

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TERMS.

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All letters and communications should be directed to W. E. Ewer, Grass Valley, Cal.
By vote of the "California Quartz Miners' Association," this paper has been adopted as the official organ of that body.

IMPORTANT TO POSTMASTER.—The Postmaster General has recently decided that if Postmasters do not give publishers of newspapers notice that their papers are not taken from the Post Office, within five weeks, they are liable for the tax.

WE read the present number of the Journal to several persons who are not subscribers; that who from their connection with the mining business of this state may be supposed to feel an interest in sustaining the only paper in California, devoted especially to that chief of the industrial resources. We should be happy to receive orders from any who may desire the paper, and send their names to our list of regular subscribers.

More New Quartz Machinery.

The Philadelphia *North American* describes a new quartz pulverizer, designed to reduce quartz tailings, substantially as follows:—

"It is composed of four or five different wheels, worked by one and the same power at the same time. The first is on the principle of the arrastra, with its millstone located one above the other, and discharging into each other. To the arrastra is attached a self-feeder, doing away with the expense and labor of a man to feed. The tailings are taken from this machine, beaten, and submitted to another crushing process while it is perfectly dry. This last machine is called a pulverizer, and is composed of six cast iron wheels, within a circle of eight feet in diameter, running in different lines upon a smooth iron surface, in a regular, steady, twisting motion. The tailings are discharged from this instrument into a 'hopper,' and thence by force of gravity under the wheels. From this apparatus they are discharged into another double hopper—the inside receives the tailings and the outer apartment the water—both being discharged through respective tubes upon tables, and carried by the force of a small stream of water, let on periodically upon four rotary blankets, and conveyed from them into boxes underneath, where it is finally taken out. The last machine is called a separator, and is used to separate the gold and iron, or any other metallic substances, from the quartz.—The whole of the various portions of the machinery can be so adjusted as to work together or separately, rendering it of course, much better adapted to any one of the different purposes to which it is applied."

A GOOD PROSPECT.—A miner, of our acquaintance less than a mile from this office, while cleaning out a well, some two weeks since, came across an old oyster can, which, on opening he found to contain \$3,000 in \$20 gold pieces. He had dropped the same into the well, some two years since, for safe keeping. The next day found him on his way to Frazar with twice three thousand dollars in cash. He will take up provisions from San Francisco to stock a trading post.

New Quartz Mills.

Mr. Barber, of this place, is now putting up a battery about 6 miles from Forest City, for Messrs. Biswell & Smith. It is to be attached to their steam saw-mill. It will consist of eight stamps. Their ledge is a very heavy and promising one, and located about half a mile from the mill.

Messrs. Turner & Holt have commenced the erection of a Steam Quartz Mill one mile below Agua Fria. It will run four stamps and four arrastras; that mode of amalgamation being considered necessary, as the gold is very fine and difficult to save.

Messrs. Strong & Co. are about to put up a mill on El Dorado Creek, in Moriposa County. They will stamp their rock dry.

The Aerial Quartz Company, at the Buttes above Downville, recently made a reckoning of the yield of their mine for the previous month, and found the sum to be, round numbers, \$30,000.

The Keystone Mill, at Amador, under the management of D. R. Eaves, in the last two runs, previous to the 19th of June, returned \$12,000, against an expense a fraction short of \$8,000.

The Onedis Mill, according to the Amador Ledger, is doing a good business. On Saturday, June 12th, the Superintendent took out \$500 in four days run. It was estimated that \$2,500 would be realized during the subsequent week.

The Editor of the *Calaveras Chronicle* speaks of a piece of quartz recently taken out of the vein of Hemlock & Co., weighing about 35 lbs. and valued at \$4,000.

On comparing the amount of deposits at the San Francisco Mine for the first two weeks in May with the corresponding period in June, it appears there is a fall-off of about \$400,000. It is to be presumed that a large portion of this gold has gone to Frazar River—a large drain for only two weeks. Upwards of \$2,000,000 have already gone in that direction, of which more than \$50,000 to the outside has returned.

REWARD OF PERSISTENCE.—The "Try Again Tunnel Co." on Smith's Flat, Placer Co., after running their tunnel 1,200 feet, and working most of the time since 1853, have recently struck the long sought for lead, and find six dollars to the pan, on the bed rock. Their claims are extensive—good for six years work. The Company are now sinking an air shaft, near the head of their tunnel, after the manner of Artesian well boring—a new idea and a good one in deep ground.

STRANGE BUT TRUE.—The Amador Sentinel very truthfully remarks, that the month before the Frazar River gold fever broke out, California produced more than an average amount of gold for the last five years.—Within that time, new diggings and new quartz lodes were struck which would have sent the country in a blaze, had they been struck a thousand miles from home; but as these diggings were struck in California, they attracted no particular attention.

RIOT.—The Stockton Republican states that Fremont's Quartz Claim, at Mariposa, (the famous Josephine vein, if we are not mistaken,) is paying \$4,000 per week. This is better than the profit usually derived from Mexican grants.

THE COPPER ORE from Arizona recently smelted in San Francisco, shows a yield of 60 to 65 per cent. Seven hundred tons of this quality are now being transported from the mines.

The Gold Excitement.

All the excitement about new gold discoveries does not seem to be confined to California. Outside of this State, Iowa, Georgia and Texas, seem to be particularly infected with the "gold mania," as will be seen by perusing the subjoined paragraphs. It is said that the people of Georgia as well as Iowa are rushing towards the scene from all directions—forsaking houses, lands, and ploughs to try their luck in this new Opium.

Wonderful stories are also rife at the East with regard to rich gold deposits in various parts of the Rocky Mountains. The Cape of Good Hope, also, will be seen by reference to page 6, of this No., in holding out inducements to the seeker after the precious metal.

All these accounts from a distance, as well as those from our own northern coast, are, no doubt, great exaggerations, but are doubtless true to a certain extent, and will undoubtedly induce, under the present state of the gold excitement, a thorough exploration of the various localities alluded to.

"Misfortune in Iowa."

Under the above head an eastern paper thus announces the discovery of gold in that State:—

Iowa has met with a most deplorable misfortune—one which, unless it can be soon overthrown, will stop her rapid growth, suspend her agricultural prospects and ruin her people. Genuine gold has been found in several of her counties, and the excitement is consequently great. The *Lookout Journal* of the 6th inst., has the following intelligence respecting the discovery, which is in addition to that already stated in the newspapers. *Poor Iowa!*

It is said that to the fame in relation to this discovery which we gave last week we add the following.—We quote from a paper published in the immediate vicinity of the

present discovery, that at noon on the 2nd inst., a party consisting of three men, while passing from \$2 to \$300,000, found a "ten strike." The discovery was made, worth, from four to five acres, but it is generally found in small pieces, each pan of dirt containing from three to nine colorings.

From 50 to one hundred hands are at work on south River, turning its course, in order to work the present channel. Enough gold has been found to warrant, it is thought, the labor required to turn the river into another channel. Fine particles of gold have been found on the banks of the river, yielding a good return for the labor required in separating it from the sand."

GOLD MINING IN GEORGIA.—A new gold mine has been discovered in this State, rather a great increase of yield in a year, partially worked. Puckerton's gold mine, about two and a half miles from Atlanta, has developed a vein of gold of a rich quality, equal, if not superior, to any discovered in this country. The vein has been penetrated at three different points, and exhibits the most encouraging per centage of profit.

MEXICAN EXHIBITION.—The second annual fair of this Institution, commences in September. The Pavilion Building is undergoing repairs. The approaching exhibition is expected to surpass that of last year. The managers display taste, tact and admirable energy, and are up to the times.

SCHOOL MONEY.—The July (semi-annual) apportionment of school fund for Nevada city is \$544 67, to be divided among 1,046 children. Two bits to a cherry.

GOLD IN TEXAS.—A correspondent of the *Richmond Dispatch*, writing from Belton, Texas, says:—

Our town is now in a great stir about some gold discoveries that have recently been made on the head waters of the Pecos and Colorado rivers, near the line of New Mexico, three hundred and fifty miles northwest of this place. A company of one hundred and twenty men will leave here as soon as "grass rises," for the scene of operations. They will go armed to the teeth, and be governed by military rules. Every mess of five will have a light wagon, drawn by four mules, with an extra saddle horse for each man, and provisions for four months. Their route will be across the plains, hundreds of miles from any settlement, and they will no doubt have to do some tall Indian fighting, as the Comanches and Apaches are very hostile. But they will be hard to whip, as they are all picked men and inured to hardships. Their outfit will cost about \$50,000.

GOLD IN THE SOUTH.—A San Bernardino correspondent of the *Los Angeles Pioneer*, of May 30th, says that D. G. Weaver, and other citizens of San Bernardino, are working a mine of extraordinary richness near Warner's ranch. Whether quartz or placer, the writer does not state.

FRAZER RIVER QUARTZ.—The Editor of the *Alta* has examined a specimen of Frazer River quartz which he describes as follows:—

"The quartz is of a dull greenish white color, from which the gold crops out in layers of fine laminae, mixed with oxidized sulphur of iron. The specimen seems to be thoroughly impregnated with sulphur, which makes the quartz nearly so. Its edges like a third layer, in a lead—gold decomposed sulphur of iron, and sulphur. The quartz itself is as hard as feldspar in some portions, whilst in others it partakes of the characteristics of limestone."

The description is not very intelligible, but may be of some interest as the first exhibited in California.

REMARK.—The two last paragraphs of the 2d article on the 3d page are the concluding paragraphs of the 1st article on that page. They were accidentally misplaced in "making up," and the error not discovered until the edition was worked off.

QUARTZ MINERS' CONVENTION.—By reference to notice in another column, it will be seen that the next Quartz Mining Convention is to be held at San Francisco, on the 7th of September next.

THE GOLDEN PRIZE.—This interesting literary paper, of May 22d, has been received. "Sarah De Vaughan," an historical tale of the South-west; "a wager for love," by Edgar Arnold; or "the story of a Will," are among the choice contents of this number.

HIGH PRESSURE.—In the attempt to touch the Leviathan, the water was forced through the pores of solid iron, like a thin dew, until the whole cylinder ripped from its bottom with a noise like a dull under explosion. The iron of this cylinder was six inches in thickness, and stood a pressure of upwards of 12,000 pounds to the square inch before it gave way.

JUNE RAINS.—The showers which fell on the 16th and 17th of June, appear to have extended very generally over the State.—According to the record in the State Register they are the second June rains we have had since 1849. In 1754, four inches of rain fell in June; in 1849 showers fell in both June and July.


GRASS VALLEY, JULY, 1858.

British Scientific Research.

GEOLOGY OF THE AUSTRALIAN GOLD FIELDS

Mr. Phillips, in his "Notes," says that all the Victorian gold placers are near or upon the granite. It would appear from the "Notes," that this entire region has been subjected to extensive, intermittent, and deep seated disturbances. Indeed, the region, even now, is in a state of unrest, for

Interesting Explorations at the West
and South.

 Barnum, the enterprising showman, is again rapidly ascending the ladder of fortune, and will soon be even more than himself again.

Early Mineral Discoveries in California

When the extent and supposed importance of that discovery was first promulgated, the reports were received by the papers with many expressions of doubt. It created but little excitement for a while, from the fact that the public ear had grown familiar with reports of "Gold Discoveries," and it was not until the gold began to find its way down the river, in considerable quantities, that any special excitement was produced. Accord-

Exports.—The exports from the port of San Francisco, during the month of May, exclusive of the precious metals, were \$420,448—an enormous increase over the corresponding period of last year. Of this amount \$230,000 were sent to New York; \$31,534 went to Australia, \$16,991 to Vancouver, \$25,761 to the Sandwich Islands, and the balance to seven different ports of the Pacific south of San Diego.

MECHANICAL.

A New Discovery—Ancient Architecture.

We take the following curious announcement from the Paris correspondent of the New York Times:

"First a word on a new discovery. Why is it that the present century is so far inferior to the centuries of the dark ages in the domain and sublimity of the fine arts? For a long time it has been an opinion that the singular harmony which reigns in the proportions of the architectural monuments of that age was not the result of mere accident, and that there must have been some mathematical secret unknown to the present age. This secret a German, Mr. Henzelmann, has found. It was a secret which belonged to antiquity as well as to the Greek and Roman epochs. It presided as well at the construction of Solomon's temple as at that of Parthenon of Rome and Athens. The discovery of Mr. Henzelmann was the result of study. With his plumb-line, compass and square, he travelled through Germany, Italy, France, and England, measuring and calculating, and finding in all the structures of the different ages of the past the same harmonious lines. He has demonstrated beyond contradiction the correlation of the Greek with the middle-age architecture.

It is a secret, which was the property of the Brother Masons (Free Masons) of the present day, from the time of the building of Solomon's temple down to the fifteenth, perhaps even to the sixteenth century, as has been just by them, and the sublime art of architecture entered its age of decadence. The Greeks and Hebrews took great pains to keep this secret. Pythagoras in Greece, Moses, David, and Solomon among the Israelites, were among the number of its possessors. The Free Masons, who are the descendants of these Israelite Masons, were undoubtedly the heirs of the art of the stream, the great architect, but unfortunately they have lost it. In the *Paralipomenes* we see David giving to his son the plans and descriptions which he had received from God, to raise him a temple at Jerusalem, with its proportions and forms indicated by the different books of the Bible, we can trace the elements of the harmonious system recognized by Mr. Henzelmann."

The reported discovery by this German architect, according to the correspondent of the Times, appears to be creating a great degree of interest in France, so much so that M. Lenoir, a distinguished architect of Paris, has submitted a report upon the same to the Minister of Public Instruction and Worship. M. Lenoir not only endorses the reality of the discovery but supports its truth and correctness with additional proofs.

To us, at this distance from the scene of the alleged discovery, it will be time enough to enquire whether it is a reality, or a mere moral architectural dream, when we learn definitely what it is. Meanwhile we can keep it in view, and await further developments.

It would really be a fine thing, as the correspondent of the Times says, "if the methodical plodding of this German has really seized upon the living spirit of the dead body of ancient architecture, as it hovered over the glorious ruins of its material shrines—what would all the glory of all the antiquarians be compared to this?"

Architecture, in its simplest forms was evidently among the earliest inventions of man; but its progress varied in almost every locality, taking its peculiarities from the form of structures first used, by the leading races. Whatever rude structures the climate and materials, most convenient, obliged the inhabitants of a country to use at first, the same style of structure, in all its prominent features, was afterwards kept up and improved upon by their refined and progressive posterity.

From this cause the inhabitants of ancient Petra and Egypt, who first inhabited caves and grottoes, adopted the dreary, sombre style of architecture now known as Egyptian. The Greeks first occupied cabins, formed probably of logs, and hence the various orders of Greek architecture differing so materially from the earlier Egyptians. The Gothic was derived from the bowers of trees amid which the founders dwelt in their primitive days, and took from those the peculiarities of the forest in the sharp angles and tall spires of their architecture. The

Chinese style of architecture, with its pavilion roofs and pointed minarets, is evidently moulded from the tents of the roving Tartars. Thus local circumstances everywhere produced their peculiar styles of architecture, which were brought to the utmost degree of perfection as each different people arrived at their culminating point in arts and refinements. Of the progressive steps of architecture history affords but little account. All the wealth and skill of the ancients appear to have been lavished upon their temples and imperial cities, and modern researches have revealed the most stupendous monuments of labor, such as would absolutely appal the inhabitants of the present age.

MECHANICS.—Let your son study drawing if he has a taste for it. The fact that you are a mechanic, or that you are a poor man, is no reason why he should not study drawing, or any other useful art he has a mind to study. It is a matter of surprise that a thing so obviously useful as drawing, and in many respects so indispensably necessary, should be so generally disregarded. Parents cannot know what their children will be. By giving your son a solid education, which, thanks to our free school system, you can easily do, instead of laboring all his days as a journeyman carpenter, as you have done, he will have an opportunity to rise to the head of his profession, and win honor and riches as a great builder and architect. A boy who is to be a bricklayer, a carpenter, or a stone mason, would derive much advantage from a thorough, practical knowledge of drawing and natural philosophy. Of course your son should also be taught that the humble duties of an avocation are not to be despised, but that whatever he plans to do should be done well. When he places a board, he should be ambitious to place it better than any else could do it, and so of everything else.

It is a matter of serious doubt, notwithstanding the plausibility with which the above discovery is announced, whether any general principles of architecture, common to the cultivated nations of antiquity, and unknown to moderns, ever existed, except in the imaginative brain of some theoretical enthusiast.

The harmony and sublimity of ancient architecture, without doubt, grew up naturally and gradually, as above related, taking its various forms from the different circumstances under which men lived. The mechanical ingenuity of the world, was confined almost exclusively to architecture. Mechanical contrivances, in aid of labor, were little thought of. Labor was cheap, and the necessities and luxuries of life few and simple. All the wealth and ingenuity of the time was lavished, first upon the public buildings, then upon the private residences of those in power and the opulent. Slaves without number and at trivial cost, supplied the power which the present value of labor renders it necessary should be sought for elsewhere, and which has led to the introduction of steam and the various mechanical inventions for simplifying and doing away with the labor of many hands. Thus it was that the inventive genius of the ancients, directed to a single point, was able to bring its favorite art to a degree of perfection, which all the ingenuity of modern skill has never yet been able to improve upon, and in all probability never will. The rules and secrets by which they wrought were none other than those now in use. If they possessed any secret peculiar to themselves, it was that of intense and close application to one thing, the lack of which in the present age of the world, accounts for the want of expertness in individuals, and the lack of perfection in accomplishment, which is quite to characteristic of the age.

TO FASHEN LEATHER TO METAL.—Soak the leather in a hot solution of pot galls, and apply it to the metal upon which it is to be fastened, having first given the metal a coat of glue. When dry, the leather will adhere so tight that it sooner tears than separates from the metal.

Practical Mechanics.

Livingston, the African traveler, describes an ingenious method by which the Africans obtain water in the desert:

"The women tie a bunch of grass to one end of a reed about two feet long, and insert it in a hole dug as deep as the arm will reach, then run down the wet sand firmly around it. Applying the mouth to the free end of the reed, they will form a vacuum in the sand beneath, in which the water collects, and in a short time rises to the mouth." It will be perceived that this simple but truly philosophical and effectual method, might have been applied in many cases, in different countries, where water was greatly needed, to the saving of life. It seems wonderful that it should have now been first made known to the world, and that it should have been habitually practiced in Africa, probably for centuries. It seems worthy of being particularly noticed, that it may no longer be neglected from ignorance. It may be highly important to travelers on our Western deserts and prairies, in some parts of which water is known to exist below the surface.

A while ago a company on Trinity river desired to raise a heavy water wheel, could not contrive so "purchase" by which it could be done. At length a sailor brought his ingenuity "to bear" thus: A heavy timber was placed above the shaft, and a new, dry rope was wound spirally round both; the rope was then wet, and the shrinkage raised the wheel.

A heavy statue was once about to be raised to a high pedestal in Rome; it was the work of a great sculptor, and prodigious anxiety was felt for its safety, but the machinery was ill-contrived and its power of elevation was spent as the foot of the statue almost swung on the pedestal. All were at a loss until a plebeian cried out, "Wet the rope." Water was applied, and directly the sculpture was in its place.

Says the Trinity Journal from which we condense the above, under the battered hat of many a worker is a laboratory of thought, strange in its operations as the occult mysteries of alchemy.

Progress of Invention.

The number of new inventions patented in this country during the past twelve years, about 15,000, exceeding, by almost 1,000, the total number of patents issued during the previous seventy-five years. The last year has been peculiarly fruitful of new inventions, so far as number is concerned, but not so far as originality, or particularly great characteristics. The inventions have been mostly improvements upon former inventions, or confined to matters of lesser interest and importance.

Not so with the inventive genius of our Trans-Atlantic cousin. The immense military operations which have engaged the attention of the British nation for the last two or three years, has served to arouse to the utmost, the capacity of that people in the production of the peculiar class of inventions called forth by the exigencies of their situation. Accordingly we find, during the past year, a wonderful progress of improvement in arms, conquest and iron manufactures.

A glance at the record of patents granted by the British government, during the past year, affords abundant proof of this assertion. While there are 68 patents for fire-arms, 41 for improvements in gun carriages, and 11 for gunpowder and other explosive compounds, there are no less 73 for steam engines, 62 for boilers for steam engines, 61 for improvements in the construction of screws and locomotives, 53 for marine engines, and 77 for arrangements for consuming or preventing smoke in all descriptions of furnaces, and 54 for novel arrangements of motive power, or power to be obtained from new sources. In the manufacture of iron, one hundred and twenty patents were taken out.

The inventions and improvements relative to textile manufactures were exceedingly numerous, as also those of looms, and machinery for producing them. For carpets there were 21 patents, 33 for land and water conveyance, and 34 for pipes, tiles, and bricks. 36 for writing instruments, 38 for paper and pasteboard, and 46 for lithography.

Tinning Cast Iron.

Tin ware is much used for cooking and other utensils, because it is easily manufactured and cheap. It is made by submerging very thin sheet iron in a bath of molten tin. After the plates of sheet iron are properly prepared by various manipulations, beatings &c., they are then dipped, singly into a pot filled with molten tin, and, from thence, with the adhering grease, they are in the same manner submerged in a pot of molten tin, which has about four inches of melted tallow swimming upon its surface, the tin being kept at a degree of heat just below that required to ignite the tallow. They are then left standing in the pot for about two hours.

It is a curious fact, the philosophy of which is not easily explained, that while tin will adhere very tenaciously to wrought iron, it has no affinity at all to cast iron. Various efforts have been made to tin cast iron, but generally with very little success. Hollow cast iron ware is sometimes imperfectly tinned, but it will not wear.

Quite recently, however, it is stated that M. Weinberger, of Paris, has succeeded in tinning cast iron, and rendering the tin coating as durable as our common tin ware. For this purpose he subjects the cast iron vessels to a decarbonizing process, in the same manner that malleable cast iron is treated, by including them in cases filled up with some decarbonizing agent, such as the red oxide of iron, and then submitting them to a red heat for several days. Such vessels after being decarbonized, are secured clean with acid, sand and warm water, to remove all the oxide; they are then submerged in molten tin in a vessel, having its surface covered with tallow, in exactly the same manner that sheet iron is tinned. This is a valuable and simple process for treating cast iron to be tinned, and may be carried on very extensively wherever a good quality of cast iron can be readily obtained. The discovery, if it really amounts to what is claimed for it, is a very valuable one, for there are many cheap and useful articles which can only be made to advantage of cast iron, that will come into more extended use when a process of tinning them can be successfully accomplished.

The Unbroken Arrow.

There's more than honor on one tan-brown hand,
Rough with the honest work of busy men,
Than all the soft-skinned hands of the land,
The nice white-knifery of 'upper ten';
How bright the forge, the sturdy anvil ring,
It rings the anvil of King Labor's courts,
And swells the sound the clattering hammers bring,
Thus snuffs the thousand thumps of the land,
Fairs the ribbons from the ratchet place,
As if one that grace my lady's hat and cape,
Nor dees the jolter's honor bush or wane,
Bost to the lawyer with his brief and pad,
Folds then, noble arabesque, as thy humble trade,
"The noblest this nob's most vaunted pride,
Man's soulless prize his feat of work has made,
But time is based on that of God himself."

Frank Spaul.

INTELLIGENCE OF LABOR.—Epistolical outsiders, who have neither capacity to perceive nor disposition to investigate, may enwrap themselves in the mantle of coquetry and talk about the "ignorant miners," but we tell them that among the miners of California—the mine miners who wear rough shirts and coarse boots—these miners whose hands are hard, and whose faces are tanned—there are more men of intelligence and education than there are men who have occupied honorable intellectual positions, and sustained them with credit, than "was ever dreamed of in their philosophy"—more gentlemen, in the literal sense of that word, than are to be found, proportionately speaking, among the population of any other State in the Union, or country in the world.—(Gold-miners' Era.)

A ROTARY MARINE ENGINE.—Some enterprising citizens of New Bedford, are trying the experiment of applying the "rotary engine" to steamers. They have constructed a small steamer, which recently made a very satisfactory trial trip, averaging 8 miles an hour and 11 miles running, carrying but 35 lbs. of steam, which 53 is the amount allowed by law. The engine is said to have worked admirably.

California Mining Journal.

GRASS VALLEY, JULY, 1888.

The Great City of the North—Where
it will be.

It being fully conceded, notwithstanding the vast amount of exaggeration that is indulged in with reference to the richness of the Frazer River mines, that an important mining and agricultural interest must soon grow up in the territory of the Hudson's Bay Company, between the parallels of 49 and 55, it becomes a matter of considerable moment, not only to speculators, but as well to all classes, to ascertain the most convenient point upon the seaport or navigable waters, from which the interior mining region can be reached.

The two rival seaports at the present time are Victoria and Whatom, with an interior depot at the head of river navigation to correspond to the city of Sacramento in this State. All accounts, however, agree that Frazer River presents to the navigator, long before he reaches the heart of the mining region, obstacles of a character altogether insurmountable, and that the shores and adjacent country render the construction of wagon roads almost out of the question, while even the practicability of pack trails is considered a matter of serious doubt.

According to present information the most practicable method of forwarding provisions to the upper waters of Frazer and to Thompson's rivers, is by way of the Columbia and the valleys of its northern branches, involving a circuitous route of some 120 miles of river navigation and 300 by pack mules. From these facts the necessity of some other route than any yet mentioned, for the transmission of supplies to the mines is readily apparent. Can any better one be opened.—Let us see.

Some 250 or 300 miles up the sea coast, and just above the northern extremity of Vancouver's Island, according to the reports of numerous travelers who have visited and written at length upon that region are several good harbors, and also several small rivers emptying into the sea. Vancouver speaks of "two good harbors" in this vicinity which he named respectively Port John and Restoration. Now it is not possible to find a good wagon road route from these harbors to the head waters of Frazer River. Let us see. We have before us a little work published in London, Eng., in 1846, and written by Rev. G. C. Nicolay, from which we learn that in the fall of 1792, McKenzie, the discoverer of the river of that name, with a small company of trappers and Indians, left Fort Chipewyan and ascended to the upper waters of Peace River, a tributary of the McKenzie, where he wintered.—The next spring he ascended Peace River and finding that it had its source to the westward of the Rocky Mountains, followed it up to a lake, where it took its rise. About half a mile from this lake, by a well beaten Indian trail, over which he carried his canoe, he found another lake, the outlet of which flowed south-westward. He went down this river about 120 miles, until he ascertained that it was the Frazer. He then retraced his steps about half the distance where he built a log cabin and lived his canoe and such articles as the party did not wish to take overland. From this point the party started overland for the Pacific; having first been assured by the Indians that they could reach the sea coast from that point in eight days. The party set out encountered with the necessary provisions for the voyage, and in addition therefor "arms, ammunition, instruments for astronomical observations, and articles for presents."—The account does not state how much time the party occupied in making the route, but from the glowing description of the country we are led to believe the trip was an easy, as well as short one. Soon after starting he arrived at the head waters of a

small river where the parties purchased canoe of the Indians, and concluded the trip with them to the sea coast, and thence along the same two or three days until they arrived opposite the northern extremity of Vancouver's Island to which they crossed.

These facts appear to us important at this time as indicating the practicability of finding a good site for a seaport near where McKenzie reached the coast, and from thence by river and road of easy grade to the head waters of Frazer, down which supplies may be readily taken to all the principal mining camps that may be established.

When McKenzie reached the coast he painted, in large letters, upon the face of a prominent ledge of rocks, an appropriate inscription which was seen and read by the traveler Dunn, who visited the location 41 years afterwards.

The Supposed Profits of the Allison
Ranch Quartz Lead.

Under the above head a Grass Valley correspondent has addressed the following to the S. F. Bulletin:—

EDITOR BULLETIN:—Your correspondent Cosmos, writing from "Nevada," on June 1st, described the Allison Ranch lead of this place, together with the machinery, &c., and states that there are employed in the mines, and about the mill, sixty hands; that 8,000 tons of rock have been raised, which has yielded an average of \$200 per ton; and that the gross yield has been about "one half million of dollars." Cosmos appears to have visited the mine, and to have obtained his information from those who knew it. It is my purpose to dispute his figures, although a million and a half of dollars is a large sum to have been taken out in less than two years, and to show that a large quantity to put through a mill in twenty-two months, with a capacity of only twenty tons in twenty-four hours, which quantity "they aim to put through a mill."

The mill was first set in operation in July 1856. Then, and for sometime afterwards, for want of water, they could only run four out of eight stamps. Since then, there has been some delay for repairs and to put in a second pump, &c. However, admit the quantity of ore raised, and the product of the same to be a million and a half. The question is, how much of that belongs to the profit side of the account? They employ sixty hands; assume that number to be between the average since the mill started in July, 1856. We have for 32 months, of 25 days each, 560 days—equal to 35,000 days of single hand, at \$4, the average—equal to \$1,400,000. The fuel oil, &c. \$20 per ton, 560 days of 25 stamps, of 25 days each, 560 days, at \$50,000. Wear and tear of ore, \$22,000. These estimates are very liberal. Let us recapitulate them:

Fuel oil, &c.	\$132,000
Machinery	50,000
Wear and tear	22,000

Total, \$204,000

Product of 8,000 tons ore \$1,500,000

Profit, (with machinery clear) \$1,286,000

A snug little fortune this for six poor men to make in so short a time a mine. There is plenty of room to allow an additional dollar per day for labor, which would then leave the owners a profit of a million and a quarter of dollars. If the mine has produced the amount stated, it is an interesting fact; if it has not produced one-third of that amount, the publication of such fictitious is not calculated to promote that great and growing interest of our State, quartz mining. M.

There seems to be a very general tendency among mining correspondents throughout the State to exaggerate, with regard to the yield of the mine. Isolated cases of extraordinary yield are trumpeted forth to the world in such a manner as to convey very erroneous impressions with regard to the general yield of the mines. It is a fact, notorious among all miners, that no reliable information can be collected by traveling correspondents by interrogating miners with regard to the yield of their claims. Miners everywhere regard such inquiries, especially from strangers, as a meddlesome impertinence, which does not call for truthful replies; accordingly their answers in such cases are usually given as the caprice or whim of the moment may dictate. A practiced miner never places any reliance upon such information.

The publication of such letters are productive of much mischief, and, in regard to

quartz operations, it in various ways impedes the legitimate growth of that important branch of mining. The letters of "Cosmos," to one of which reference is made in the above communication of "M." are generally as little exceptable as any which we have noticed; but in the one to which reference is made by "M." we think he has made a wild use of figures—whether they are based upon his own judgement, or whether they were obtained direct from the parties connected with the Allison Ranch lead. There is no doubt but that lead is one of extraordinary richness, quite rich enough to satisfy the craving of the most inordinate thirst for wealth, still if we take the aggregate yield of the mine, as given by "Cosmos," and divide the same by three, we feel quite confident that the product will give the full yield of the same up to the present time—two-thirds of which, 333,000 are we willing to set down as profit—"a snug little fortune" even this "for six poor men to make in so short a time!"

Any practical quartz miner will see that 8,000 tons of ore is a pretty large quantity to put through a mill with eight stamps in 22 months, especially, when it is known that for a considerable portion of that time only four were running, and for a considerable other portion the entire mill was engaged in custom work, or lying idle for the want of rock to crush, to say nothing of stoppages for repairs; moreover, \$187 per ton is a very large average, when it is known that much rock has been crushed which did not yield over \$25 to the ton.

We are confident that the proprietors of the Allison Ranch lead, are quite satisfied with the actual yield of their mine, and have no desire that any exaggerated statement should go out with regard to its supposed yield. A personal acquaintance with "Cosmos," warrants us in saying that nothing could be farther from his desire than any intention to mislead or misinform the public. His figures in the letter referred to have been the result of incorrect information or hasty conclusions. The simple truth with regard to the mines is far better, and productive of more good results than any exaggerated statements, however plausibly put forth.

MINING IN ARIZONA.—Professor Pierce, Mining Engineer and Geologist, and S. Barton have been sent to Arizona from New York, by the Lopia Land and mining company. They are to put the silver mines of the company in operation, having all the approved appliances with them. They go out in company with a party of United States Territorial officers and agents.

E. E. Dunbar has recently arrived at Washington from Arizona, and confirms the value of the late silver operations in the centre of the Territory. He states the condition of the Territory as distressing in the extreme, and brings the proceedings of a meeting of the citizens of Santa Cruz Valley, addressed to Congress, praying for relief.

New Quartz Machinery.

The editor of the Mariposa Star has seen the model of a new quartz crusher, the invention of Mr. J. S. Diltz, which the inventor thinks is a decided improvement on anything now in use. Each stamp falls in a cylindrically shaped battery—each of which is self-feeding and independent of the other. In these the quicksilver is placed, as also in the shallow bed forming the base of the battery, and into which they discharge. Each is provided with a copper lining, fitting nicely, and so arranged that it can be removed and replaced at pleasure. The model exhibited was arranged for fire stamps, and has been sent below as a pattern for casting.—When completed it will be placed in the mill owned by Messrs. Diltz & Sooks at Guadalupe.

The San Franciscans have been regaling themselves, for the past two or three weeks, on water-melons from the Sandwich Islands—at the very modest price of two dollars apiece.

Kern River.

The immense popularity which has been created for Frazer river by a few letter writers, has at length aroused its rival upon its southern border from its Rip Van Winkle sleep; and Kern river is now more trying to shine! Witness the following:—

GREAT EXCITEMENT IN KERN RIVER.—JACOBI, of this city, says the Stockton Democrat of a late date, has received a letter from his brother, dated Visalia, Tulare Valley, which says the mail rider had passed through that place, from Kern river, with the news that a miner on the river had found a vein from which, by the aid of an arrastra, he crushed in one week ten thousand dollars! Great excitement prevails there.

GREAT EXCITEMENT IN ANOTHER QUARTER.—The Mariposa Gazette learns from H. D. Bequette, of Hectors Express, through a letter from David B. James, a well known citizen of Tulare Co., that on the 23rd of May, an expedition of about 100 men, mostly from influential and respectable Mexican came to the house of David James, and stated that he wanted to make up a company to go with him to Owen's Lake, about one hundred and fifty miles from Visalia, where he had worked in company with two Freshmen for three days, on the south fork of a river that feeds Owen's Lake, and found thirty three ounces of coarse gold, when the Indians attacked them and killed one of the Freshmen, and that the other and himself returned. The diggings are about five days' travel from Kern river, about twenty miles up the south branch that feeds the lake. The country is quite barren around the lake, but plenty of timber and good water in the mountains. A company has been made up, and the men are leaving diggings which pay them \$8 to \$10 per day. The diggings are all surface, with slate bed rock. Great excitement prevails through that part of the country—greater than exists in this region in reference to the Frazer River diggings, and many are preparing to leave for the new mines.

Another Allison Ranch Lead.

Messrs. Rush & Layton, of this place, have recently erected a steam pump upon a quartz vein, on Pike Flat, and are now running into the vein, on the incline. They have already penetrated a distance of 60 feet, all the way through rock of fabulous richness. It is mostly decomposed and frequently exhibits gold in the utmost profusion. As one of the partners panned out a pan full of the dirt, a few days since, another, who was watching, by offered \$200 for the gold—it was at once there was not less than \$250 in the pan! Twenty, thirty and forty dollar pans may be selected almost any day. The entire lot of rock thus far raised, is estimated at from \$250 to \$300 per ton. As we have already stated, they have gone down on the vein about 60 feet, and all the way through this description of rock, and there is not telling how much deeper it will continue. Enough ground has already been opened to secure a handsome time at all concerned. When the shaft reaches the depth of 70 feet, side drifts will be run preparatory to the regular commencement of stoping. It will be some two or three months before any of the rock will be crushed. When that time comes we shall look out for an astonisher.

The original proprietors of this lead, Messrs. Fletcher, Carey, Clark and Biggs, have recently entered into a contract with Messrs. Rush & Layton, two of our most enterprising and energetic mill owners under which the latter have put up a steam pump to drain the vein and raise the rock for one quarter of the yield. The prospect is morally certain for a fortune to all concerned. The lead is an extension of the well known "Badger Hill Lead," owned by Messrs. Wallace & Co.

THE GOLD RESOURCES OF CALIFORNIA.—We acknowledge the receipt of a publication under this title. The author is Monroe Thompson, who professes to have a practical knowledge of our placer diggings.

The Fraser River Mines.

We have collected a few facts, with regard to this new mining region, which may prove of interest to some of our readers.

THE RIVERS.

The site of the new El Dorado is far up among the inhabitable regions of the north; the upper tributaries of the golden stream having their sources hidden in the midst of impenetrable and eternal snows. The rivers, in the mountains, where the gold is found are encompassed and confined to narrow channels by rocky and precipitous mountains, rising with steep, often inaccessible for miles, to heights varying from three to six thousand feet! The river discharges an immense volume of water and, where it opens into the valley the body of water, at its highest stage is said to be eight times the volume of the Sacramento, when bank full. The reports which are constantly reaching us by every arrival all agree in pronouncing it one of the most turbulent and dangerous rivers on the globe.

The Gold.

The information we have with regard to the gold is extremely scanty. The existence of the precious metals in its sands is no new thing. It has been gathered by the Indians for many years, and its existence has been frequently alluded to by travelers and in official reports. So well established has long been the fact of its existence that allusions to its presence, has not, until recently excited any especial curiosity or excitement.—A writer in a late number of the *London Mining Journal* issued before the news of the new excitement could have reached there, carelessly speaks of it as follows, in an article with reference to the proposed continental railroad through the British Possessions:

"In approaching its western terminus, opposite Vancouver Island, it will traverse the most eligible portion of the Hudson's Bay Company's Territories, west of the Rocky Mountains, coal being found along the coast, and gold in Thompson's river."

The Italians are our own. There can be no dispute about the actual existence of gold in considerable and remunerative quantities; but it will require time to develop it. Take the reports altogether, weed out the heresay evidence, throw aside the mere vaunts of dying rumors which have no other foundation than the overwrought imagination of some excitable letter writer, or some paid scribbler, and what does it all amount to? Does it amount to half as much as can be gathered in the same time from any mining country in this State, from Kern River, from the Colville mines, or even from the newly discovered gold fields of Iowa? No sensible man will for a moment dispute our position that it does not.

THE CLIMATE—RAINS.

A number of publications, treating incidentally upon the climate of the Fraser River country, had been given to the world long before the present excitement had an existence. In addition to this evidence, we have the testimony of numerous persons who have visited that region within the past year. All accounts agree in what the simple fact of latitude should satisfy us about, that the winters of the mountain region, where the gold is chiefly found, are very long and extremely rigorous.

The spring months of April and May are remarkably fine and pleasant. During the month of June it rains almost incessantly.—July, August and September constitutes the short and extremely hot summer, during which time the air is filled with mosquitoes, sand-flies and other like torments which are generated in surprising numbers by the extremely hot sun bursting suddenly upon the moist earth after the heavy June rains. In October the rains again set in, and are continued, at frequent intervals through that month, November and a part of December. During the most of the latter month and the entire of January, February and March, the whole mountainous region of that Country

is locked in the frosts embrace of the ice King.

From this it will be seen that the earliest mining cannot be done before the last of March or first of April. At that time the rivers are low by reason of the frost. During the month of May the rivers begin to rise by the melting of snow and by the first of June they are back full from that cause and the June rains, so that no more mining can be done until the first of August, when the rains again commence falling. During the months, May, August and Sept. will be the best mining season. Early in October the rivers again commence rising and keep up until the rains turn to snow in the mountains, long before which time but little mining can be done, and that high up in the banks.

From the above it will be seen that no mining can be done during the months of January, February, March and June, next to none in December, and but very little in April, July, October and November. The best months being May, August and September—3 months. Not more than half workmen can be counted for April, July, Oct., November—making, at the outside, but five months work in 12. The diggings must be rich indeed to pay under such circumstances.

NO MINES OUT OF THE RIVERS.

All accounts agree in stating that no mines have yet been discovered away from the rivers. This is a fact too notorious to be questioned. The favorable reports—what we have had—have come from those who worked during the month of April and a part of May, when the rivers were low.—Easier seen to have prospected back in the hills and ravines where they could get at them, but in almost every case without success. The color can be obtained anywhere, but no diggings that will pay. This is the universal experience in the mines of Washington Territory, where they have washed for four years, and it will prove true of all that region north of the Columbia River.—The country is so exceedingly rough and the river banks so steep that all the gold has found its way into the very lowest bars on the rivers.

One great peculiarity of California, and that which adds the chief value to her placer mines, is the fact that her entire system of rivers has, at some remote time, changed their course, submerging, in all probability almost the entire country, and piling up immense beds of auriferous drift in the ancient depressions, and leaving the ancient river beds high and dry, like beds and thousands of feet above the level of the present system of rivers. It is the subsequent wearing down of these ancient deposits that has enriched the rivers of California, and it is those old river beds which now afford the richest and most permanent placers of California.

No such condition of things exists in the Fraser River country. The mountains have been gradually elevated to their present position without any attending or subsequent convulsions to disturb the flow of water.—From the time when "Creation first began," those rivers have been running in the same old channels of the primitive granite formation, and wearing them deeper and deeper until their banks are now almost inaccessible—the cañons far exceeding in depth the corresponding ones in our own State. If this inference is correct, which all accounts go to substantiate, it will be in vain to look for extensive diggings anywhere in that region except upon the rivers.

ACCESSIBILITY, &c.

Enough is already known to satisfy any one with regard to the difficulties of reaching the mines, and of securing supplies in such inaccessible places. Our correspondent "A. Q." in this issue, gives a few calculations on this point which it will be well for us to consider before starting on the trip for Fraser.

There is or soon will be, if this excitement continues, an army of from 10,000 to 15,000 men on the waters of Bellingham Bay.

The Great New York Reservoir and New Central Park.

The New Yorkers are determined to outshine the world in their New Central Park with its magnificent artificial lake and other adornments. The estimated cost of preparing the Park is set down at \$1,500,000. It will no doubt actually cost nearer double that amount. The Park covers some 140 squares of the city, embracing within its limits one of the present city reservoirs. Some idea of the size of the new reservoir, or lake, as it is sometimes called, may be formed from the following extract from the breaking ground speech of the Mayor, on that occasion. He said:—

"On our new lake of the Manhattan, no locomotive or animal might ride, and find ample room and verge enough on its surface to float at anchor. Even the noble Niagara, the admirable master-work of the genius of the lamedated Steers, might ride here on the waters of this lovely lake; and by its side the colossal Pennsylvania might be moored, and cover less than the fortieth part of the lake, while every other vessel of the American Navy, with the starry flag of the Republic streaming from the peak, might be moored around."

American and European Railroads.

The average cost of American railroads is \$40,000 per mile, while those of France cost \$120,000, and those of Great Britain \$170,000. Notwithstanding the great disparity of cost in favor of American over European roads, it is a notorious fact that the American system as a paying investment has proved a decided failure, while both the English and French roads, as a whole, have both been eminently successful. The balance sheet exhibited by the European roads shows, most conclusively, that there is something rotten in the American system, and that there is an urgent necessity for its entire reconstruction. The failure of the American system may, no doubt, be mainly attributed to the loose, unthrifty and fraudulent manner in which many lines have been projected, and a still greater number mismanaged. Of the 1,000,000,000 which the American railroads have cost, not more than one-half has been paid in, while the balance is represented by subscribed stock. The aggregate dividend for the past year does not exceed 2 per cent. and on 150,000,000 of railroad bonds, not even the interest has been paid! This exhibition is certainly unbecomingly flattering to our national pride, but yet it is truth and should be known and circulated so that some remedy may be devised by which this great and growing interest may be made productive.

IMPORTANT DISCOVERY.—An experiment has lately been tried in Paris, after a new system, by which hides and skins of all descriptions may be dried in a few minutes, without any machinery and in all latitudes. Skins so dried are preserved without any unpleasant smell or diminution of weight or quality. They are dried at a small expense and are said to be superior to those dried in the sun. South America supplies more than 12,000,000 pounds of green hides, which arrive in France in bad condition, sometimes in a state of decomposition, with considerable loss to the owners. This new process will, it is said, preserve them completely.

The citizens of Downsville are raising money, for the purpose of projecting suitable water works for the protection of that town from fire. Cast iron pipes are to be laid down, with hydrants at proper distances, hose, &c.

The Nevada Journal is calling earnestly upon the citizens of that place to take some steps toward putting the town in a condition to defend itself against the ravages of fire.

STARVED HIMSELF TO DEATH.—A man by the name of Alfred White, who was recently sent to the Michigan State Prison for life refused to partake of food and starved himself out in his determination until he died. It must require an unusual degree of nerve for a man to destroy himself by the slow process of starvation.

Waiting for the fall of Fraser.

It is estimated that some ten thousand men have already left San Francisco for the new diggings, most of whom are waiting for the river to fall, in order to pass over the rapids, to the good diggings on the upper "Fraser," and on Thompson's rivers. The time fixed for the fall of the river is from the beginning to the end of August, by which time it is reasonable to estimate that there will be another ten thousand added to the first, say in all twenty thousand would be transported in canoes to "the" diggings.—How many a canoe will carry, bow many canoes there are, or the time that will be occupied in a trip I know not, yet suppose that each canoe will carry five, with provisions, tools, &c., and that ten days will be the average time for a trip, it will require 500 canoes, each to make 8 trips, to convey the impatient miners to their diggings, and would consume in time 80 days—commencing Aug. 15, the last would not reach their destination until November, by which time *Fraser* would be ready to return; while the last would stand a poor chance to do anything. Q.

THE GOLD EXCITEMENT IN IOWA is still on the increase. A letter from Keokuk to the N. Y. Tribune, dated May 10th says "There has been great excitement in our city for the past few days, in consequence of the discovery of gold mines in several counties in this State. Gold mines have been discovered in Madison, Warren, Clark, Webster and Polk Counties. It seems that the mines in Polk County were discovered last fall by a farmer; that he suppressed the discovery till within the last month, when he made it public. Since then, gold mines have been discovered in the counties above mentioned.—Warren County undoubtedly contains the richest mines in the State, and although the discovery has not been made two weeks, there are over 400 men working the mines there, making from \$3 to \$15 per day. I saw a gentleman from the mines there to-day. He states that he has averaged \$17 per day, and has been at work about a week. He brought with him to our city a lump of gold larger than a hen's egg, that he picked up. The steambos Edward Manning left our city this morning, with 150 passengers, bound for the gold mines. The steambos Alice leaves to-morrow morning for the diggings. From our city, people who wish to go to the Warren county diggings, can go nearly all the way by steambos up the Des Moines River. With no other motive than to inform your readers of these facts, I send you some."

THE LAKE STATE.—Minnesota is the land of Lakes, beautifully clear crystal sheets of water too, from one mile long to thirty, and varying in width from one-third of a mile to ten or fifteen miles; Red Lake being even larger, thirty miles in length and twenty in width. The *Minneotan* gives a list of the names and dimensions of ninety-five of these lakes, and says there are scores of lakes shining all over the State, measuring from one to five miles long, which are not included in the table, on account of their having no name.

CHICAGO.—A western editor gives the following somewhat amusing description of this growing city:

Chicago is a bustling city. It was formerly in Illinois, but now Illinois is in it. Lake Michigan is situated on Chicago. The principal productions of Chicago are corn, oats, statistics, wind, the Democratic Press, and Long John Wentworth. The population of Chicago is about sixteen millions, and is "rapidly increasing." The people are very unassuming and moral—almost to much so. The real estate dealers are all honorable men. Ike Stratus, and would not sell it for anything. Chicago is not in the temperate zone, the habits of the people not being at all inclined that way."

A Masonic Lodge has already been instituted at Fort Lake, on Fraser River.

What is styled timidity, is probably nothing but the fear of showing too little merit.

Cornish Mine Photographs.

Mr. George Henwood, a very clever English writer, and one thoroughly conversant with the peculiar characteristics of the miner and the business of mining generally, is now travelling through the mines of Cornwall, and corresponding with the London Mining Journal, and, through that medium, giving his observations to the public under the head of "Cornish Mine-Photographs." We propose to give a few extracts from some of the most interesting of these letters, commencing with his "photograph" of—

"THE MINE ADVENTURER."

The Adventurer! What an awkward word to be used; but what the English language to be ransacked, not one could be found more appropriate to, or significant of, the person or situation intended to be represented by the noun substantive. So precise is the character, that we confess the difficulty of the task we undertake in its description under its various phases, and approach the duty with a shudder. So very different, and so changeable under varying circumstances is he, that we scarcely know in what point of view to take him; so perfectly altered does he become, even under temporary influences, that we scarcely recognise him as the same individual. The proverbially sensitive chameleon is not half so uncertain, for he merely changes the color of his skin; the adventurer wholly changes, not only his outward appearance and manner, but his very nature and character, and becomes metamorphosed, and subject to "passions varied as the varying hour." We must, therefore, proceed to secure the best portraits we can, leaving the artist to begin at the beginning, we will first portray the novice, or young Adventurer, who, taken by the bait of a glowing prospect, the advertisement of a millionaire, or a sensationalizing giving broker, the blunt persuasive conversation of a wily, crafty old captain, or the advice of a disinterested friend, becomes by one means or another a member of their fraternity—for good or for evil depends far more on himself than is usually supposed. These parties are frequently persons who have been most successful against speculations of every kind, but more particularly mining. The practised salesmen delights to hear young men with plenty of cash invest eagerly against his craft; he marks his victim, and after due precaution, preparation, and time, is certain of his prize. By dint of repeated attempts and applications, the novice is induced to take a small interest, and invest a trifle he knows he can well spare; flattering accounts, with an advance in the price of his shares, completes what persuasion has failed to do. He enters on another scheme; this, too, perhaps enhances in value, and he effects a sale at a profit, most probably a fatal one for him, as he now supposes (this is the case nine times out of ten) that he is the judge of the value of such properties. If this "fond delusion" once gain possession of his soul his fate is sealed. To render himself certain on this point, he visits the scene of his speculation, that he may become most thoroughly acquainted with its bearings—fatal resolve!

In this, the chrysalis state, an embryo Adventurer may be easily known by his sanguine temperament, the extreme satisfaction and anxiety with which he listens to the tale of mining, and the eagerness with which he doubts and derides with him he hears any facts of a contrary tendency—throwing all the blame of non-success on the miners of the glorious past, and with an admirable self-complacency satisfying his own mind that things would not have been so had they been under his supervision.—He may be the most generous and liberal towards the object of his fond anticipations. It amuses the initiated to observe with what ecstatic enjoyment he expresses himself on the glorious past, and with what vivid imagination, and to hear his description of beautiful castles, of aerial structures—grand indeed for the time, but, oh, how ephemeral! He poor, mortal, works himself up to a pitch of expectation by transient success and overweening confidence that makes the reverse far more terrible and afflicting than reverse usually are. Such are, and always will be, the conditions of fresh mine Adventurers, except extreme caution be exercised, or experienced practitioners be consulted, and their advice adopted.

It is said—"a woman's first love never forsakes her during life." The same may be said of a man who has once adventured in the mine; whether he be successful or not makes but little difference—the fact is the same. If he has been fortunate he has good reason to increase his interest; if not

he, like all others, endeavors to regain what he has lost. Independently of all this, there is a bewitching uncertainty about mining that becomes positively irresistible to its votaries, particularly to the non-professionals. Be that as it may, when the host of temper subsidies—when the time that mining abused and derided is a matter of history—when times are in demand—when there is a rising market—when every one is making money, and all in *celu de race*—the old Adventurer, at an early stage, feels the warm glow of the mine, and he is drawn and he issues forth again into the vortex of his old habit, expatiates on his former luck and experience, for the special delusion of a beholder of the men metaphysics, by whom he is looked upon as a prodigy and oracle; they, as in duty bound, follow his advice and example. At this period he makes hay while the sun shines, and does not fight for power or place, with his arduous, onerous, ill-paid, thankless duties. No; "experience bought is better than experience taught;—he practices the old sports, and does not find even this kind of mining so bad after all; thus he closes his career as an old Adventurer. The poet says, "there is a tide in the affairs of men, which, if we follow, leads us to fortune." Few things afford more practical illustrations of the truth of the remark than mining. We have known scores of old men, who, in the quietest and early career in life suffered all kinds of privations and trials, but who by perseverance, and by not being warped or troubled with temporary difficulties and trials, have triumphantly shown success to be the rule, and not the exception. These gentlemen generally begin where the timid leave off, and thus reap the fruits of their quietness; they watch the turn of the tide, and float on with powerful aid to the haven of fortune.

It is an wonder that we see so many phases of character as we witness in Adventurers. From the commencement to the conclusion, as we have just attempted to describe; from the bland, kind, cheerful, liberal, and generous, to the trials of the commissionaire, chairman, etc., in all its responsibilities and cares; to watch these virtues clouded, perverted, changed to acerbity and morosity of temper, and the old man, who is so kind to himself and to everyone by whom he is surrounded, until he is at last, as we have said, quite the affair in disgust; to witness the same man under the influence of a strange visit, the mine and, instead of visiting and working himself into a fury over matters he now understands, seeing the caprice and agency of their duties, that the committee and chairman are constituted of persons qualified for their situations, and not mere aspirants, equanimity of mind, and he returns to his old character, and their order accounts to this enriching them as well as himself, doing more good than all the ardent young Adventurers or knowing fault-finders in the world put together. He inherits the delight and profit of the officers of the company, who prefer having a person to watch over their actions who really does understand and can appreciate their labors, than a supervisor who knows nothing, and, therefore, continually finds fault without reason.

And now, old Adventurers, if you be successful in your *debut* be not over sanguine; be prepared for a time to be discouraged; be not alarmed at a groundless panic; but, above all, do not be led away by or encourage the advances of "Hecatostomomorphs." If you be induced, by untoward circumstances, to desert the profession, remember to take the tide at the turn—to begin where the timid leave off, and to appreciate their labors, than a supervisor who knows nothing, and, therefore, continually finds fault without reason.

It is said by one who knows, that several of the leading members of the U. S. Senate are confirmed believers in the modern doctrine of spiritualism and that in a short time elections will be more or less controlled by this new ism.

A horse shoe nail was found completely imbedded in the heart of a horse which was recently being cut up for "dog meat" on the premises of Sir W. Trollope, of England.

The victim of the "Bill Pook" affair in New York some two or three years since lived several days with a pistol bullet completely imbedded in his heart. It was thus found on post mortem examination.

ANOTHER WOOLLY HORSE.—It is said that a Virginia gentleman has in his possession a colt, some three years old, which is without a mane, and woolly as a sheep.

Railroad Extension.

Mr. Judah, Chief Engineer of the Sacramento Valley Railroad, will now commence the survey for a branch line from the main trunk to Auburn, and from that town to the highest practicable mountain point on the road to this place. A branch railroad as far as the Bear River crossing, between this place and Auburn, will be of great advantage to this county, and will secure all the freight and passenger business from this place and all points above.

PROFITS OF MINING IN ENGLAND.—We have before us a tabular statement of *fifty-one* English mines of tin, copper and lead, which have declared dividends during the year 1857. Of this number the shares of only eleven have fallen below their original assessment costs. The average cost per share of the whole fifty-one is \$8,220; while the average present market value, per share, is \$29,315, an increase in value of about 300 per cent over their first cost. The total amount of dividends declared by these mines during the year 1857, was \$1,372,095.

The copper ores from 135 mines in Cornwall for the year 1856 realized the sum of \$6,209,175.

SINGULAR PHENOMENA.—At Milwaukee, recently, a tidal wave rushed into the river, upsetting a steam ferry boat, and doing other damage. An equally rapid fall of water succeeded the sudden rise. The phenomena were more marked on the beach of the lake. At one place the water before the fall was within three feet of the floor of a warehouse, when it retired rapidly, leaving dry ground under the building. In about twenty minutes the water rushed back in two great tidal waves, rising as high as to force up the flooring of the warehouse, and to flow into cellars in the lower part of the town. The difference between the highest and the lowest points, within three quarters of an hour, was fully six feet. The occurrence creates great wonderment at Milwaukee.

The Fraser River mines are still taking away large numbers of our population. Not less than thirty or forty have left during the past week, and numbers are leaving almost every day. We most sincerely wish the fullest success to the adventurers, but we have not the remotest doubt but that ere the rains set in we shall record their return, in scores, most bitterly repenting the day that they were so completely carried away by one of the most ardent humbugs that has ever been devised to fleece the California public.

WANTS TO GET BACK.—One of our leading quacks, recently resolved a letter, a few days since, from a person who had formerly been in his employ, but who being early taken with the Fraser River epidemic, invested all his means in an outfit to the northern Eldorado, and now finds himself "strapped;" in the boasted land of gold, without means to get either a comfortable support there, or to get back again to a place where there is at least an average probability of being able to do a little more than get a living. He wrote to his old employer asking for money to get back with, and promises faithful labor.

The Arizona copper mining company sent an agent to the east, by the steamer of June last, for the purpose of looking into the practicability of transportation by steam wagons, and canals, with the view of acquiring, if possible, some more ready means of transporting the company's ore from their mine to navigable water, if possible. The agent will also visit England or business of the company, before his return.

The latest spiritual manifestations have taken place in the laboratory of Dr. Hare, a celebrated spiritualist of Philadelphia—they consist in transmitting copper pennies into gold! A very convincing test, surely, if they can only succeed in making people believe they are not "bogus."

Gold Mining in Iowa.

At the latest accounts the gold fever was on the increase. Reported discoveries of gold mines in Union and adjoining counties, are mentioned in the papers, and parties are said to be making from five to ten dollars a day in gathering the dust. Occasionally, \$200 lumps and good sized nuggets reward the toil of some lucky individuals. The sand on the streams where the gold is found is the same kind as that in which the gold is found in California. A letter from Osceola, in Clark county, to the Burlington Hawk Eye, says: "The gold excitement is high here. There is a company of some fifty hands at work turning South river, and as soon as they get it completed, the dam and race dug, they expect to find plenty of the precious metal. There are others making good wages, digging the hills bordering the stream. It has been found in a number of places in this county."

Other accounts pronounce the whole affair a humbug, and say that but very little gold has been found, and that the "diggings" will not pay anything like ordinary wages. We wait for further developments.

Gold at the Cape of Good Hope.

The London Mining Journal of April 10, says: "From the Cape of Good Hope we have a report that gold has been discovered at Stutterheim, in British Kaffraria. An officer of the German Legion, Lieut. Baur, states that three men of the Legion had obtained, by washing, about two ounces and a half of gold in one day."

MORE GOLD IN WASHINGTON TERRITORY.

Valuable gold discoveries have been made in the Black Hills, a short distance to the west of Olympia, in Washington Territory. It is believed the diggers will pay from five to six dollars a day when they are properly opened. There is little doubt, especially in view of recent discoveries, that the entire Pacific coast, from the Isthmus of Darien to the uttermost habitable regions of the frozen north, is one vast deposit of mineral wealth, the key to which is in the hands of the Anglo Saxon race, and by means of which, that people, united as they are by common origin and common interest, will soon be able to control both the political and commercial destinies of the world.

A Wife Compressed into a Ring.

A certain Russian noble, who lately visited Paris, was noticed to be constantly plunged into deep sadness. He wore on his finger a very remarkable ring, large enough for a bracelet, and extended over his hand like a buckle for the ring finger. It was of a greenish color, and traversed by red veins. It attracted the attention of every body, but as no one was bold enough to interrogate the mysterious stranger, until one day a lady, meeting him in a public park, ventured to say, "You wear a very handsome ring." The Russian made a movement as though he would conceal his hand, but that feeling gave a desire to unburden himself. "It is not a ring," he answered, "but a sepulchre!" A shudder passed thro' the whole company. "This jewel, Madame," he continued, "is my wife. I had the misfortune to lose her some years since, in Russia. She was an Italian, and dreading the joy bed which awaited her after this life, I carried her remains to Germany where I was about to lose her. I pressed me the remains I directed to make of the body a solid substance, which I could always carry about me. Eight days afterward he sent for me and showed me the empty coffin, a horrid collection of instruments and skeletons. This jewel was lying on the table. He had through means of some corrosive substance acquired with a celebrated chemist, and compressed that which was my wife into this jewel which shall never move leave me."

This burial by chemistry is an improvement on the present one, lately proposed by the French papers. Should it become popular, a widow may hereafter have her husband made into a bracelet with a chain attached to remind her of the matrimonial bond. A husband will have his wife done into a pin, and certain academicians, old fogies—who know very good good cook butts.—[N. Y. Tribune.]

The State Agricultural Fair.

On Monday, the 23d day of August, the great fair of the State Agricultural and Horticultural Society will commence, in the city of Marysville, and continue until the next Saturday. The agriculturists and the friends of agriculture, in the State, anticipate a vast amount of good from the fair, and we trust they will not be disappointed.

The officers of the Society are making every effort in their power to render this exhibition superior to any of its predecessors, and an honor and credit to our young and vigorous State.

We had the pleasure, on Saturday last, of meeting with John C. Fall, Esq., of Marysville, the President of the Association, and Judge McRae, who are making a tour thro' the mining counties, for the purpose of examining into the various modes of mining—both placer and quartz, preparatory to making their report upon the same to the Society. They spoke in the highest terms of the extensive tunnel operations in the placers of this and Sierra Counties, and of the quartz operations in this place.

NEW STAR—Minnesota and Oregon are now members of the Union of States, and the flag which will be displayed on the coming anniversary will be embossed with two new stars. Oregon will enter the confederacy entirely free from debt and with \$7,000 in her Treasury and \$32,000 due on a congressional appropriation.

Arizona has not a ghost of a chance for many years to come. After Kansas gets through no new State will be admitted unless the requisite population of 93,000 (or 120,000 after 1860) has been attained.

THE SUNDAY LAW.—The Supreme Court has rendered a decision, declaring the Sunday law, passed by the late Legislature, unconstitutional.

UP AND DOWN.—The new comers from the Atlantic States are constantly wondering their way upwards into the mountains to take the place of those going to Frazer. The chances are ten to one that the majority of those who go up our rivers will do better than those who go down.

PACIFIC MAIL STEAMSHIP COMPANY.—The annual report of the Pacific Steamship Company has been made. The statement of the condition of the company shows a surplus of \$423,246 on the 1st of May, out of which a dividend of 10 per cent. has since been declared. The company have been unable during the year to dispose of any of their steamers, and consequently continue to own thirteen, ten of which are actively employed.

Fish—California cured cod-fish are now offered in the San Francisco market. They were taken and cured last season in Fugot's sound. They are said to be decidedly superior to the eastern article. As a matter of fact the speculation does not pay; but the profit is important as affording another evidence of the increasing list of California's home productions. The business will eventually be a lucrative one.

MOUNTAIN GRAPES.—There is a grape vine in the garden of Mr. Scott, in Boston Ravine, which was set out only two years ago, and the root of which is now only two three years old, upon which we yesterday counted one hundred and twenty bunches, nearly all of mammoth size, several of which are even now one foot in length. We think that it will do to brag of. He has also an apple tree, three years from the bud, with eight apples on it!

Two new metals, called Homcor, gold, and Argentina, silver, have been introduced in New York within a short time, in the shape of spoons, forks, etc. It is claimed they look and wear as well as gold and silver. They cost a little more than the ordinary silver-plated ware.

The New Overland Mail Route.

The new mail route from the Missouri border to Placerville, via the South Pass and Salt Lake, is no doubt one of the best, well under way, and the Pioneer coaches over this great National Road, are to-day rolling up the magnificent Valley of the Platte. This is to be a weekly line, and when the stock is fairly on the road, the schedule of through time is to be reduced to 28 days.

The unexpected condition of affairs at Utah, and the concentration of a large body of U. S. troops at that point has rendered this route a matter of absolute necessity, in spite of the policy hitherto pursued with regard to overland communication.

The Philadelphians are talking magniloquently of their plans to augment the future commercial prosperity of their city. They talk of buying the Collins steamship line, and have even proposed to extend their programme of enterprise by the purchase of the great "Leviathan."

We understand that Messrs. Larimer & McMurtrie are taking out about \$4,000 per week from their claims on New York Hill. Their rock averaging about \$40 to the ton.

Messrs. Lee & Simpson are also doing well. We have heard nothing definite of late from the other mills of this neighborhood, but presume they are doing well.

Green corn has made its appearance in our market, from the Sacramento Valley.

TRAMROAD.—\$400,000 of gold dust was purchased in this place during last month by three buyers. There are some small outside buyers, who are purchasing small sums, which are not included.

About \$550,000 was purchased during the same period in Nevada. All the dust which goes from this place is obtained in this immediate vicinity. The dust shipped from Nevada includes the most of that taken out in the upper part of the County.

Report, which we believe, in this instance is true, has it that the Alta here, in this place, is turning out from two to three thousand dollars per week. The expenses of the Company, cannot exceed, we should suppose \$800 per week. A pretty good business. When any of our Grass Valley friends that have gone to Frazer find as good diggings as these in that region, we trust they'll "make a note" of it.

THE CALIFORNIA CULTURIST.—We have received the initial number of this Magazine, published by Wheeler & Wadsworth, at San Francisco.—O. C. Wheeler, Editor. The matter of the number before us is varied and interesting, and reflects much credit upon its conductors. The publication is one greatly needed in California, and should receive the hearty support of all interested in the agricultural and general prosperity of the Golden State. The illustrations are of superior character, and add much to the interest and value of the publication. Among them we notice an engraving of "Howland's Patent Rotary Quartz Mill," giving a very correct idea of that new and valuable invention. We wish the publishers the fullest success in their new and useful enterprise.

NEW LINE TO FRAZER.—The Nevada Journal says that Thomas Eirod left North San Juan a few days since for Frazer River, taking ten passengers and agreeing to convey them to the new diggings for one hundred dollars each. The journey is to be performed by land all the way, with a wagon and mules. Eirod has been nearly the entire route once and is presumed to know what he is about.

It is said that an attempt is actually to be made to recover the million and a half of dollars that went down in the Central American, although she is sunk in water over five-eighths of a mile deep, and in a spot that is ninety miles from the nearest land.

Singular Qualities of Light.

Take an engraving which has been kept in a dark room, and expose one-half of it to the sunlight, the other half being covered with an opaque screen; then take it again into a dark room, remove the opaque screen and place the whole surface in close proximity to a sheet of sensitive photographic paper, and allow it to remain thus for some hours. It will now be found that the portion of the engraving which has been exposed to the light will have reproduced itself upon the photographic paper, while no effect has been produced by the part which was covered with the screen. Paper exposed to sunlight, then quickly placed in a covered tin case, will, when set in the dark, radiate phosphorescent fire through a round aperture in the lid, and produce a circular mark on photographic paper—even impressing upon it the lines of an interposed engraving.

The effects of light and electricity depend upon the molecular structure of bodies subjected to their influence. Carbon, in the form of the diamond, transmits light, but stops electricity; carbon in the form of coke or graphite, into which the diamond may be transformed by heat, transmits electricity but stops light. All solid bodies which transmit light are non-conductors of electricity while all the best conductors of electricity are opaque to light.

Some kind of the trout, for instance, fresh caught from the water, if placed in the sunlight with a green leaf or similar object placed upon it, for an hour or so, will show upon its side a well defined image of the leaf, transferred in the same manner as a photograph is transferred to the sensitive paper.

All are aware that a dark room is not as healthy as one that is light. There is an invisible phosphorescence that radiates from walls and furniture, which exerts a powerful tendency to produce chemical changes greatly affecting the animal body which inhabits it.

Atmospheric air is changed into ozone by a succession of electrical discharges passing through it. The effects and nature of light is as yet but very imperfectly understood. It is a subject regarding which much is yet to be learned and presents a wide and interesting field for scientific investigation.

An Exchange says: "A bill passed the U. S. Senate, April 14th, giving E. M. Kemp \$30,000 for a machine for 'stratifying gold and other metals'."

Mr. MARSHALL made the famous discovery of gold at Sutter's Mill on the 19th of Jan., 1848—over ten years ago.

A GAS MIKE.—Messrs. Darcoste, Tison & Huxley, who are mining in the lead mines, about two miles from Galena, recently put in blast at a depth of 40 feet, and exposed a crevice in the rock from which issued a stream of some kind of gas, which ignited upon the application of a light, throwing up a flame about four feet in height, and burning with radiating jets and scintillations in a sort of *feu de joie*.

Upon examination, the fissure seems to enter a sort of opening or cavern, in which can be seen lime formation of incrustations and stalactites. It is an east and west crevice, and indications of a rich opening are apparent. The evolution of combustible gas is a new and unaccountable phenomenon to the miners; and affords a chance for the investigation of some of the scientific secrets.

SAVES FOR CALIFORNIA.—Mr. J. H. Hollister, a wealthy and enterprising Licking county (Ohio) farmer, has started with a company of thirteen young men for the purpose of driving ten thousand sheep from Missouri to California. He expects to be on the road with the flocks, and pays the boys \$9 per month, and the aggregate expenses of the journey.

A BOLT OF FIRE.—An Eastern paper says that as the New York and Worcester train was passing through Natick, Mass., recently, a ball of lightning as large as the two fists of a man, descended, ran along the telegraph wire, and exploded with a report as loud as a cannon. The wire was consumed, and the posts within a space of half a mile, were shivered from top to bottom.

A Living Leyden Jar!

A human being, possessing the same electric power as a Leyden jar is in the employ of one of the newspapers of Cincinnati. It is said that he is so full, and so capable of receiving electricity, that whenever he goes into the press-room, where the belting and machinery is in motion, and the friction of course engendering a large amount of the electric fluid, he is charged at once, and sparks can be conveyed by touching him, as if he were an electrical machine. When he, in that condition, insulates himself by standing upon a plate of glass, his hair stands erect, and he can light a jet of gas by applying a finger to it. He is certainly a great curiosity.

Shipments of Treasure for Quarter Ending July 31, 1858.

April 5	\$1,674,296
May 20	1,937,734
May 26	317,777
May 30	1,879,972
June 5	2,346,062
June 21	1,857,795
Total	\$11,618,436

Married.

At McCarthy's Ranch, near this place, June 28th, by Rev. Morris Evans, Mr. J. H. Huxley, to Miss Emily McCarthy.

At the same time and place, of the same, he the same, Mr. CHAR. H. BOWMAN to Miss EMILY MORRIS.

CONVENTION.

QUARTZ MINERS OF CALIFORNIA.—The annual Convention of the Quartz Miners Association of California, will be held in the city of SAN FRANCISCO on the 7th day of SEPTEMBER next. Quartz Miners from all over the State are respectfully invited to attend the Convention. By order of the Executive committee, SAMUEL PURDY, President.

THE GOLDEN PRIZE.

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Three copies one year.....\$5 00 and 3 gifts.
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Ten copies one year.....15 00 and 10 gifts.
Twenty-one copies one year 30 00 and 21 gifts.
The advertiser to be distributed are comprised in the following list:

10 packages of gold, containing \$500 00 each.
10 do. do. do. 200 00 each.
10 do. do. do. 100 00 each.
10 Patent Lever Hunting cases..... 50 00 each.
10 Watches..... 100 00 each.
20 Gold Watches..... 20 00 each.
50 do. do. 60 00 each.
100 do. do. 30 00 each.
300 Ladies Gold Watches..... 30 00 each.
200 Silver Hunting Cases..... 20 00 each.
100 Silver Watches..... 10 00 each.
1000 Gold Guard, vest and
Foil Chains..... 10 to 30 each.
Gold Lockets, Bracelets, Broomsticks, Ear-drops,
Bread Pans, Gold Pins, Sleeve Buttons, Rings, Shirt
Studs, watch Keys, Gold and Silver Chains, and a
variety of other articles, worth from fifty cents to \$5

Immediately on receipt of the subscription money, the subscriber's name will be entered upon our subscription book upon a name, and the gift corresponding with that number, will be forwarded, without cost to the subscriber, by mail or express, post paid.

All communications should be addressed to
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48 and 49 Market Building, 335 Broadway, N. Y.

A specimen copy sent to all applicants. A specimen copy of the "Golden Prize" may be sent to all offices. 29.